Abstract

The present invention relates to universal lossless data compression and decompression methods, as well as to apparatus for their implementation. The method is based on predicting the characters of data stream being processed by comparing them with predictors in one or several predictor tables and counting consecutively predicted characters, thus reducing considerably the number of output operations. Addressing in predictor tables is performed by means of one or several hash strings, each of which being formed by means of an unique hash function correlative with the input data. Processing the data stream in such a way allows eliminating the compression rate limitation that depends on the taken character length, thus increasing the compression rate and, at the same time, decreasing data processing time sufficiently.

FIG. 2